CONSOLIDATED INFORMATION TECHNOLOGY SERVICES TASK ASSIGNMENT (TA)

1. **TITLE:** (D402A) GEOGRAPHIC INFORMATION SYSTEMS SERVICES AND SUPPORT

   TA No: RFT001-Rev16

   Task Area Monitor: **Alternate Task Area Monitor:** None

   NASA POC: **Software Control Class:** Low Control

   Type of Task: Recurring Task

2. **BACKGROUND**

   The NASA/LaRC Geographic Information Systems (GIS) Team was formed in the Facilities and Program Development Office (FPDO), now known as the Capital Investment Planning Office, in May, 1995 with a charter to accomplish the tasks laid out in the GIS Business Plan (http://gis-www.larc.nasa.gov/bplan).
   Additionally, Memorandums of Agreement (MOA) with GIS partners (USAF ACC and LAFB, other NASA centers, Facilities and Related Service Activities, and the Aviation Safety Office) exist or are in planning stages to provide GIS services.

3. **OBJECTIVE**

   The objective of this task assignment is to support the GIS Team by providing Information Technology support that includes, but is not limited to, the following: software system design, implementation and maintenance of software systems, geospatial analysis, map generation, Global Positioning System (GPS) control network development planning and execution, database administration, database applications development, image rectification, manipulation, and analysis and computer systems administration, implementation and deployment.

4. **GENERAL IT SUPPORT SERVICES**

   Services Specified Through Exhibit A:
   Refer to Exhibit A, Inventory of Equipment and Software that defines the required General IT Support Services. The services of System and IT Security Administration shall be provided for systems in which "System and IT Security Administration Required" is checked in Exhibit A. The level of security shall be consistent with the information category identified by the code checked for each such system (see NPG 2810.1).
   Any system software, application software or database software that is licensed to run on a particular item of equipment is entered in the respective column for that item. Software that does not require a license is also included if it is relevant to any of the required services. The services of Hardware Maintenance (HM), System Software Management (SSM), Applications Management (AM) and Database Administration (DBA) are required for the items of equipment or software that are checked in the respective columns of Exhibit A.

Customer Support and IT Consultation and Training:
The Contractor shall provide the basic level of Customer Support and IT Consultation and Training given in Sections 4.7 and 4.8 of the SOW for all General IT Support Services.

Exceptions and Additional Requirements:
1. Software Development and Maintenance
The Contractor shall develop new software tools as required, and maintain existing tools to support the activities of the GIS Team. It must be noted that requirements for additional software products, and in fact, the software product definitions themselves, are future, hence undefined, activities. Consequently, schedule and deliverables will be defined and delineated in future revisions to this Task Assignment.

2. GIS Data Management Support
The Contractor shall provide support for the operation, maintenance, and enhancements of the GIS databases and associated applications, including, but not limited to, the Facility Utility Electronic Database (FUED), the Building Floor Covering and Asbestos Database (BFCAD), and Real Property and Space Utilization databases. Additionally, efforts to collect, verify, and disseminate historical data will be supported.

3. Global Positioning System (GPS) Support
The Contractor shall provide support for GPS related activities, including use of the Optical Total Station (OTS). This task includes, but is not limited to, system research and setup, field observation, network solutions, equipment readiness, training, and report generation. The Contractor shall support the specification and acquisition of technically current GPS equipment and peripherals to insure state-of-the-art capabilities to support efforts at LaRC and partner sites.

4. Buildings Spatial Data and Master Plan Support
The Contractor shall provide for continuing development and enhancement of software products to support the display, maintenance, and publication of buildings spatial data and Master Plan related data. The Contractor shall provide, pending requirements definition, a complete operational environment at NASA/LaRC for the acquisition, analysis, maintenance, and publication/dissemination of spatial data to assist in spatial decision management. This should include development of a formal configuration management plan per current and evolving applicable Langley Management System (LMS) procedures. Develop maps and PDF files reflecting updated data from data acquisition efforts. Support migration to SDE and IMS web visualization tools. Additionally, provide support for the revision and enhancement of several GIS tools including, but not limited to, the LaRC Flood Prediction Tool, the LaRC Building and Room Locator, the LaRC Equipment Locator and the LaRC Floorplan Viewer. These tools will be modified and or rewritten for deployment under the ArcIMS software and SDE GIS databases.

5. GIS Product Specialist Support
The Contractor shall provide GIS product support on a continuing basis for all systems that support GIS activities at NASA/LaRC. The Contractor shall support the specification and acquisition of technically current software and/or hardware components to insure state-of-the-art capabilities to support efforts at LaRC and partner sites. The Contractor shall be responsible for the daily operational support of the systems designated in Exhibit A. Additionally, the Contractor shall support the GIS Task Tracking System (TASKMAN) in

tracking GIS work efforts.

6. Support for GIS Team Partners
The Contractor shall provide support for the aforementioned areas as defined under the Memorandums of Agreement (MOA), Memorandums of Understanding (MOU) and internal LaRC agreements for partners/workgroups such as the USAF, Facilities and Related Service Activities, Office of Education, Office of Public Affairs, Aviation Safety Office, Safety, and the Emergency Operations Center. Support shall be provided in the aforementioned areas for other NASA centers as designated by the customer. Specifically, the Contractor will provide on-site GIS/GPS support personnel to Johnson Space Center (JSC).Additionally, a MOA with USAF Air Combat Command (ACC) Planning has been implemented and defines additional activities of cooperative development between NASA LaRC and ACC Planning.

7. Support for Next-Generation GIS systems
The Contractor shall provide support for continuing research and development of next-generation GIS systems. The Contractor shall support the specification and acquisition of software, hardware, and peripheral components to support this effort.
Additionally, the Contractor will design, develop, and implement an institutional decision support system that integrates existing and to-be-developed infrastructure information applications.

8. Design, Development, and Implementation of Geospatial-based Optimization Tools
The Contractor shall provide support for the design, development, and implementation of GIS-related tools and techniques to aid in the optimization of office and technical space at LaRC. This effort will include the specification and acquisition of resources from industry and/or academia to support design and development of space allocation optimization tools and techniques.

9. Development of Geospatial Tools to Support Capital Investment Plan in areas such as Construction of Facilities (CoF), Facility Maintenance Investment (FMI), Backlog Maintenance and Repair (BMAR) and related activities. The Contractor shall provide support for the development of geospatial and related tools to support the above areas. This effort will include the specification and acquisition of resources to support this effort.

10. Design, Development, and Implementation of interfaces between GIS and systems such as Maintenance Management, Configuration Management, Environmental, Safety, Security, and other similar functions.
The Contractor shall support the design, development, and implementation of GIS interfaces between the systems listed above. When necessary, this effort will include the specification and acquisition of resources to support this effort.

11. Design, Development, and Implementation of Move Tool to address web management of personnel moves between organizations such as OCIO, Personnel, and IAM.
When necessary, this effort will include the specification and acquisition of resources to support this effort.

12. Design, Development, and Implementation of GIS web-based Electrical distribution analysis system to support Outside Plant and Inside Building level analysis. Effort also includes interface between GIS and Short Circuit analysis SW such as EDSA and SKM, and coordination of links to systems such as Electrical Metering and Energy Management.

Where requirements for deliverables necessitate the procurement of hardware, software, GIS-related data, and additional labor resources, the Contractor shall procure those items that are needed for the successful and timely completion of task activities. Additionally, travel and training will be required for successful completion of designated task activities.

ENABLING CLAUSE BETWEEN CONITS GIS, ROME, AND OTHER LANGLEY CONTRACTORS

(a) NASA has entered into contracts with the firms listed below for other support services at Langley Research Center:

Contractor Services

ROME -- Research, Operations, Maintenance, and Engineering
MTI -- Inspection,Quality Assurance, and Survey (IQA)
ACS, Inc. -- Outsourcing Desktop Initiative for NASA (ODIN)
MLB Enterprises -- Groundskeeping and Pest Control Services

(b) In the performance of this contract, the CONITS GIS support personnel shall cooperate with the above listed Contractors by: responding to invitations from authorized personnel to attend meetings; providing access to technical information and research, development and planning data, test data and results, schedule and milestone data; limited financial data including estimates, all in original form or reproduced, discussing/coordinating matters related to projects; providing access to Contractor facilities utilized in the performance of this contract; and allowing observation of technical activities by appropriate support Contractor technical personnel.

(c) The Contractor further agrees to include in each subcontract over $1 million or 10 percent of prime contract value, whichever is less, a clause requiring compliance by a subcontractor and succeeding levels of subcontractors with the response and access provisions of paragraph (b) above, subject to coordination with the Contractor. This agreement does not relieve the Contractor of responsibility to manage subcontracts effectively and efficiently, nor is it intended to establish privity of contracts between the Government or the service Contractor(s) and such subcontractors.

General IT Support Services Performance Metrics
Performance Standard: Inventory of equipment and software is up-to-date and accurate.
Performance Metrics:

Exceeds: "Meets" and: semi-annual audit finds no deviations from the actual configuration; or improvements have been made to the configuration management system.

Meets: Data format is satisfactory, semi-annual audit finds only minor deviations from actual configuration, and tracking log is up-to-date.

Fails: Any of the requirements of this subsection (a through c) are not satisfied.

Performance Standard: The applications software to which these services apply is fully

operational and kept up-to-date with no significant disruption in capability.

Performance Metrics:

Exceeds: "Meets" and improvements are recommended and adopted; or users rate help in the use of applications very good to excellent.

Meets: The inventory, including status, of application software is current and accurate. Upgrades are installed and fully operational within 5 days of receipt (or approval, if later) with no loss of data. Users rate operation and help in use of the applications satisfactory.

Fails: Any of the requirements of this subsection (a through h) is not satisfied. Users rate operation and help in use of the applications less than satisfactory.

5. SYSTEM AND APPLICATION DEVELOPMENT SERVICES

None required.

6. WORK-AREA SPECIFIC SERVICES

None required.

7. Exhibit A

[Exhibit A](#)

8. SPECIAL SECURITY REQUIREMENTS

Unclassified data and systems

9. SOFTWARE ENGINEERING PROCESS REQUIREMENTS

All spatial data applications must be compatible with current ESRI product suite and will be maintained using the Concurrent Version System (CVS).

10. JOINT REVIEW SCHEDULE

There will be a joint review of the work of this task at meetings to be held on an as needed basis, at an agreed upon time. The following persons or their alternates are requested to attend: NASA Task Area Monitor (TAM) and Contractor personnel assigned to task. Technical performance, timeliness, cost, and staffing will be discussed. As requested, the contractor shall maintain minutes and minutes from each meeting will be emailed to participants for review and corrected where necessary. An archive of minutes will be maintained on a mutually agreed upon NASA/LaRC website.

11. PERIOD OF PERFORMANCE

This TA is effective from 02/01/08 to 04/27/09

12. TECHNICAL PERFORMANCE RATING

In evaluating Technical Performance, quality and timeliness shall be rated as follows:

Quality: 60%   Timeliness: 40%

13. RESPONSE REQUIREMENTS

This Task Plan shall address the contractor's specific work plans, associated estimated labor hours, cost and schedule.

14. FUNDING INFORMATION

Funding has not been entered for this TA.

15. MILESTONES

None required.

16. DELIVERABLES

Number	Deliverable Item	Deliverable Schedule
1	GIS Dataproducts (maps, plots, diagrams, and reports)	04/27/09 in general, specific requirements per on going customer requests. Specific deliverable and schedule per requested item defined through consultation with customer.
2	Travel/training reports	Within 10 working days of return from activity
3	GPS Data Acquisition and Analysis Reports	Preliminary data organization within 10 working days from return from effort. Final report due 30 working days after return from effort (unless delay requested by NASA due to priority shift)
4	System Administration Problem Reports and Resolution	Requests for support posted within 2 working days support provide to requestor within 5 working days (unless priority modified by NASA) resolution information posted within 2 working days of completion of effort
5	Spatial Data Changes	Requests for changes to building data documented via email within 2 working days geometry changes implemented within 5 working days (unless priority changed by NASA). Resolution of request change documented via email within 2 working days of completion. Requests for change to Master Plan level data documented via email within 2 working days geometry changes implemented within 7 working days

		(unless priority changed by NASA) Resolution of request change documented via email within 2 working days of completion.
6	GIS Software Products	04/27/09 in general. As definition and requirements for software products are developed as specified by the customer, specific schedule and deliverable items will be defined and added as revisions to this task assignment, when necessary.

17. FILE ATTACHMENTS

None.